AB 32 Climate Change Scoping Plan Implementation Update

James N. Goldstene, Executive Officer
December, 2009
California Air Resources Board

Outline

- Review of approved measures
- Preview of upcoming actions

Approved Measures

- 12 of 30 ARB regulations approved, including all nine Discrete Early Actions
- Approved measures provide approximately
 70 MMTCO2e in 2020
 - 40% of our 2020 goal of reducing 169 MMTCO2e
- First year of Mandatory Reporting complete
 - 97% compliance rate

Tracking Progress

- Scoping Plan Measures Implementation Timeline available on website
 - http://www.arb.ca.gov/cc/scopingplan/ sp_measures_implementation_timeline.pdf

Scoping Plan Measures Implementation Timeline November 18, 2009

Row #	Scoping Plan Measure	Measure #	Page #	Responsible Agency (ies) (Lead in Bold)	Planned Approval Date	Implementation Date	MMT CO₂E Reductions in 2020 [‡]	Type of Action (Regulation, Voluntary, etc.)	Staff Contact
1	Pavley (AB 1493)	T-1	<u>C-57</u>	ARB	Sep-2004 (Approved)	2009-2016	27.7	Regulation	Paul Hughes
2	Ship Electrification at Ports (Discrete Early Action)	T-5	<u>C-66</u>	ARB	Dec-2007 (Approved)	2010	0.2	Regulation	Grant Chin
3	Port Drayage Trucks	T-6	<u>C-68</u>	ARB	Dec-2007 (Approved)	Beginning 2010	3.5 [§]	Regulation	Mike Miguel

Low Carbon Fuel Standard

- Reduce GHGs from transportation fuels
 16 MMTCO2e or by about 10% in 2020
- Other jurisdictions using California's LCFS rule as example
- At the January 2010 ARB Board Meeting:
 - LCFS Expert Workgroup,
 - Sustainability Workplan
 - Guidance Document for Biorefinery Siting

Selected Measures Under Development

- Greenhouse Gas Cap and Trade
- Zero Emissions Vehicles
- Pavley II
- High GWP Refrigerant Management Program
- Renewable Electricity Standard
- Regional GHG targets for Transportation (SB 375)

Cap and Trade Regulation

- Preliminary Draft Regulation released
 - Will provide a firm, declining cap on GHG emissions
 - Trading and offsets to provide flexibility
- Extensive Public Process
- Coordinated development with WCI Partners
- Scheduled for Board action in late 2010

Economic and Allocation Advisory Committee

- Appointed by ARB and Cal/EPA to advise on auction and distribution of allowances
- Recommendations expected in January with a focus on:
 - Allocation of emissions allowances
 - Use of revenue from allowances
- Advice on economic analysis

Economic Analysis

- Working closely with EAAC and stakeholders
- Release report and update the ARB Board in February 2010
- Report to include
 - Costs and savings of reductions, including appropriate inclusion of reductions in co-pollutants
 - Timing of capital investments and annual expenditures to repay investments
 - Sensitivity to changes in key inputs
 - Impacts on small businesses

Cap and Trade Public Health Analysis

Health Impact Assessment

- Collaborating with California Department of Public Health
- Feedback from Academic Advisory Committee
- Briefing at the December 17 Climate Action Team Public Health Workgroup meeting
- Draft expected early 2010
- Draft White Paper on disadvantaged communities in process

Zero Emissions Vehicles

- Staff reviewing current regulation
 - Focus on years 2015 and beyond
- Update to the ARB Board this week
- Revisions to regulation for Board consideration in 2010
- Integration of criteria pollutant and GHG programs

High-GWP Refrigerant Management Program

- First statewide GHG rule to reduce high-GWP refrigerant emissions from commercial and industrial refrigeration systems
- Extensive public outreach process with trade associations and California businesses
- Focuses on leak inspection and repair
- Significant emission reductions (~8 MMT in 2020)
- On average, cost savings to California businesses
- ARB Board consideration December 2009

Energy Efficiency

California Public Utilities Commission (PUC)

- New 2010-2012 EE goals, funded at \$3 billion
- Shift toward deeper reductions in electricity use

California Energy Commission (CEC)

- Work begun on aggressive 2012 new building standards
- First ever appliance standards for TVs
- AB 758 targets stimulus funds for existing buildings

Other Energy Activities

- Expiring coal contracts
- California Solar Initiative
- Combined Heat & Power (CHP)
 - Ongoing Public Utility Commission work on feed-in tariff for CHP
 - ARB workgroup focused on increasing CHP

Renewable Electricity Standard

- Existing 20% Renewable Portfolio Standard
- Governor's Executive Order S-21-09
 - Makes ARB the lead agency to develop the Renewable Electricity Standard
 - Scheduled for Board consideration July 2010
- ARB working closely with PUC, CEC and Cal-ISO
- Public process underway

Other State Agency Activity

- Adaptation
 - California's Climate Adaptation Strategy
 - Integration of mitigation and adaptation
- Water
 - Recent legislation mandates a 20% cut in urban per capita water use
- Recycling and Waste Management sector
 - Mandatory commercial recycling
- Green Collar Jobs Council
- Carbon Capture and Sequestration

In Summary

- 40% of reductions to meet 2020 goal approved
- ARB to consider major regulations in 2010
- California's program a model for the region, the nation, and the world